

**DRAFT**



Page 1 of 44  
Permit No. WA0040231

Issuance Date: \_\_\_\_\_  
Effective Date: \_\_\_\_\_  
Expiration Date: \_\_\_\_\_

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
WASTE DISCHARGE PERMIT No. WA0039942**

State of Washington  
DEPARTMENT OF ECOLOGY  
Olympia, Washington 98504-7600

In compliance with the provisions of  
The State of Washington Water Pollution Control Law  
Chapter 90.48 Revised Code of Washington  
and  
The Federal Water Pollution Control Act  
(The Clean Water Act)  
Title 33 United States Code, Section 1342 et seq.

**Port of Olympia/East Bay Development  
315 Jefferson Street NE  
Olympia, Washington 98501**

is authorized to discharge in accordance with the Special and General Conditions that follow.

<u>Facility Location:</u> East Bay Development 315 Jefferson Street NE Olympia, Washington 98501	<u>Receiving Water:</u> Budd Inlet/East Bay
<u>Water Body I.D. No.:</u> 1224819475188	<u>Discharge Location:</u>
<u>Industry Type:</u> Groundwater and Stormwater from Construction	Latitude: 47° 02' 56" N Longitude: 122° 53' 44" W

is authorized to discharge in accordance with the special and general conditions which follow.

---

Rebecca S. Lawson, P.E., L.Hg.  
Southwest Region Manager  
Toxics Cleanup Program  
Washington State Department of Ecology

**TABLE OF CONTENTS**

SUMMARY OF PERMIT REPORT SUBMITTALS .....	44
<b>SPECIAL CONDITIONS</b>	
S1. DISCHARGE LIMITS .....	66
A. Groundwater and Stormwater Discharge	
S2. MONITORING REQUIREMENTS .....	77
A. Monitoring Schedule	
B. Sampling and Analytical Procedures	
C. Flow Measurement	
D. Laboratory Accreditation	
S3. REPORTING AND RECORDKEEPING REQUIREMENTS .....	910
A. Reporting	
B. Records Retention	
C. Recording of Results	
D. Additional Monitoring by the Permittee	
E. Reporting Permit Violations	
F. Other Reporting	
S4. OPERATION AND MAINTENANCE .....	1213
A. Operations and Maintenance Manual	
B. Bypass Procedures	
C. Duty to Mitigate	
S5. APPLICATION FOR PERMIT RENEWAL .....	1516
S6. SOLID WASTES .....	1616
A. Solid Waste Handling	
B. Leachate	
S7. ENGINEERING DOCUMENTS .....	1617
S8. SPILL PLAN .....	1617
S9. BEST MANAGEMENT PRACTICES/ STORMWATER POLLUTION PREVENTION PLAN .....	
S10. ACUTE TOXICITY .....	1819
A. Effluent Characterization	
B. Effluent Limit for Acute Toxicity	
C. Compliance With the Effluent Limit for Acute Toxicity	
D. Compliance Testing for Acute Toxicity	
E. Response to Noncompliance with the Effluent Limit for Acute Toxicity	
F. Testing When There Is No Permit Limit for Acute Toxicity	
G. Sampling and Reporting Requirements	
S11. CHRONIC TOXICITY .....	2323
A. Effluent Characterization	

- B. Effluent Limit for Chronic Toxicity
- C. Compliance With the Effluent Limit for Chronic Toxicity
- D. Compliance Testing for Chronic Toxicity
- E. Response to Noncompliance With the Effluent Limit for Chronic Toxicity
- F. Testing When There Is No Permit Limit for Chronic Toxicity
- G. Sampling and Reporting Requirements

S12.— BUDD INLET TURBIDITY STUDY WORK PLAN.....23

GENERAL CONDITIONS .....	29 <del>29</del>
G1. SIGNATORY REQUIREMENTS.....	29 <del>29</del>
G2. RIGHT OF INSPECTION AND ENTRY .....	30 <del>30</del>
G3. PERMIT ACTIONS.....	30 <del>30</del>
G4. REPORTING PLANNED CHANGES.....	32 <del>31</del>
G5. PLAN REVIEW REQUIRED .....	32 <del>32</del>
G6. COMPLIANCE WITH OTHER LAWS AND STATUTES .....	32 <del>32</del>
G7. TRANSFER OF THIS PERMIT .....	32 <del>32</del>
G8. REDUCED PRODUCTION FOR COMPLIANCE .....	33 <del>33</del>
G9. REMOVED SUBSTANCES .....	33 <del>33</del>
G10. DUTY TO PROVIDE INFORMATION .....	33 <del>33</del>
G11. OTHER REQUIREMENTS OF 40 CFR.....	33 <del>33</del>
G12. ADDITIONAL MONITORING .....	33 <del>33</del>
G13. PAYMENT OF FEES.....	33 <del>33</del>
G14. PENALTIES FOR VIOLATING PERMIT CONDITIONS.....	33 <del>33</del>
G15. UPSET .....	34 <del>33</del>
G16. PROPERTY RIGHTS.....	34 <del>34</del>
G17. DUTY TO COMPLY .....	34 <del>34</del>
G18. TOXIC POLLUTANTS.....	34 <del>34</del>
G19. PENALTIES FOR TAMPERING .....	34 <del>34</del>
G20. REPORTING REQUIREMENTS APPLICABLE TO EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURAL DISCHARGERS .....	35 <del>34</del>
G21. COMPLIANCE SCHEDULES .....	35 <del>35</del>

### SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S1.	Effluent Monitoring for first two weeks of operation	1/permit cycle	July <del>ne</del> 15, 2009
S3.A	Discharge Monitoring Report	Monthly	<i>Reserved for issuance</i>
S3.E	Reporting Permit Violations	As necessary	
S4.A	Operations and Maintenance Manual	1/permit cycle	June <del>May</del> 30 <del>01</del> , 2009
S4.A	Operations and Maintenance Manual Update or Review Confirmation Letter	Annually	June <del>May</del> 30 <del>15</del> , 2010
S4.B	Reporting Bypasses	As necessary	
S5.	Application for Permit Renewal	1/permit cycle	<i>Reserved for issuance</i>
S7.	Engineering Documents	1/permit cycle	July <del>ne</del> 30, 2009
S6. and <del>S8.</del>	Spill Control Plan/ <del>Solid Waste Plan</del>	1/permit cycle, updates submitted as necessary	July <del>May</del> 30 <del>1</del> , 2009
S8	Solid Waste Plan	1/permit cycle, updates submitted as necessary	July 30, 2009
S9.	Best Management Plan/Stormwater Pollution Prevention Plan	1/permit cycle, updates submitted as necessary	Jul <del>May</del> 15, 2009
S10.A	Acute Toxicity Characterization Tests	Twice/year, for the first year of the permit	Jul <del>May</del> 30, 2009 and January <del>December</del> 30, 2010 <del>09</del>
S10.A	Acute Toxicity Tests Characterization Summary Report	Twice/year	September <del>July</del> 30, 2009 and March <del>February</del> 30 <del>28</del> , 2010
S10.C	Acute Toxicity Compliance Monitoring Reports	As necessary	
S10.D	Acute Toxicity: "Causes and Preventative Measures for Transient Events."	As necessary	As necessary
S10.E	Acute Toxicity TI/TRE Plan	As necessary	As necessary

Permit Section	Submittal	Frequency	First Submittal Date
S10.F	Acute Toxicity Effluent Test Results with Permit Renewal Application	1/permit cycle	Once in the Last Summer & Once in the Last Winter Prior to Submission of the Renewal Application
S11.A	Chronic Toxicity Characterization Tests	Twice/year, for the first year of the permit	July <del>May</del> 30-30, 2009 and January- <del>December</del> 30, 2010 <del>09</del>
S11.A	Chronic Toxicity Tests Characterization Summary Report	Twice/year	September <del>July</del> 30 <del>30</del> , 2009 and M <del>February</del> rchy 30 <del>28</del> , 2010
S11.C	Chronic Toxicity Compliance Monitoring Reports	As necessary	
S11.D	Chronic Toxicity: "Causes and Preventative Measures for Transient Events."	As necessary	As necessary
S11.D	Chronic Toxicity TI/TRE Plan	As necessary	As necessary
S11.E	Chronic Toxicity Effluent Test Results with Permit Renewal Application	1/permit cycle	Once in the Last Summer & Once in the Last Winter Prior to Submission of the Renewal Application
S12.	Budd Inlet Turbidity Measurement Work Plan  Submit Measurement Results	1/permit cycle	Jul <del>May</del> 30 <del>15</del> , 2009  September <del>June</del> 15, 2010
G1.	Notice of Change in Authorization	As necessary	
G4.	Permit Application for Substantive Changes to the Discharge	As necessary	
G5.	Engineering Report for Construction or Modification Activities	As necessary	
G7.	Notice of Permit Transfer	As necessary	
G10.	Duty to Provide Information	As necessary	
G20.	Reporting Anticipated Non-compliance	As necessary	
G21.	Reporting Other Information	As necessary	

## SPECIAL CONDITIONS

## S1. DISCHARGE LIMITS

A. Groundwater and Stormwater Discharge

All discharges and activities authorized by this permit must be consistent with the terms and conditions of this permit.

The discharge of any of the following pollutants more frequently than, or at a level in excess of that identified and authorized by this permit violates the terms and conditions of this permit.

For the first two weeks of operation (the shakedown period), the Permittee plans to batch discharge the effluent from Outfall # 001. Each batch must meet the effluent limits before discharge for Outfall # 001. The Permittee must collect daily influent/effluent samples for the first two weeks of operation and measure copper, cadmium, lead, nickel ~~nickel~~, and zinc. The Permittee must submit the Influent/effluent data for the first two weeks of operation to Ecology by **June 15, 2009**.

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge treated groundwater and stormwater at the permitted location subject to complying with the following limits (these limits apply to the effluent after the effluent tank and before entering the storm drain):

EFFLUENT LIMITS: OUTFALL # 001	
Parameter	Maximum Daily <sup>a</sup>
Flow	Report
Benzo (a) Pyrene	0.031 µg/L <sup>b</sup>
Total Arsenic	36.0 µg/L
Turbidity	12.3 nephelometric turbidity units (NTUs)
pH <sup>c</sup>	Daily minimum is equal to or greater than 6.0 and the daily maximum is less than or equal to 9.0
Acute and Chronic WET Toxicity Characterization	Meet the Acute and Chronic WET Toxicity requirements in Sections S10. and S11.
<sup>a</sup> . Maximum daily effluent limit means the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limits expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day. This does not apply to pH.	
<sup>b</sup> . The method 8270C will be used to test Benzo (a) Pyrene, the same method used as in the pilot study. The quantitation level (reporting limit) will be 0.020 µg/L.	
<sup>c</sup> . Indicates the range of permitted values. The Permittee must report the instantaneous maximum and minimum pH monthly. Do not average pH values.	

**S2. MONITORING REQUIREMENTS****A. Monitoring Schedule**

Ecology will conduct a reasonable potential determination after having 6 monthly effluent test results for copper, cadmium, lead, nickel, and zinc. If the discharge shows reasonable potential for any metal, Ecology will calculate a water quality permit limit and modify the permit. If the calculations show no reasonable potential to violate the surface water quality criteria, Ecology will eliminate the metals monitoring requirements in the permit and inform the Permittee of its decision by letter.

The Permittee must monitor in accordance with the following schedule and must use the laboratory method, detection level (DL), and quantitation level (QL) specified in Appendix A. Alternative methods from 40 CFR Part 136 are acceptable if the DL and QL are equivalent to those specified in Appendix A:

Parameter	Sample Point/Units	Minimum Sampling Frequency	Sample Type
Benzo (a) Pyrene	Influent <sup>e</sup> , µg/L	Monthly <sup>b</sup>	Grab <sup>c</sup>
Total Arsenic	Influent <sup>e</sup> , µg/L	Monthly <sup>b</sup>	Grab <sup>c</sup>
Total Copper	Influent <sup>e</sup> , µg/L	Monthly <sup>b</sup>	Grab <sup>c</sup>
Total Cadmium	Influent <sup>e</sup> , µg/L	Monthly <sup>b</sup>	Grab <sup>c</sup>
Total Lead	Influent <sup>e</sup> , µg/L	Monthly <sup>b</sup>	Grab <sup>c</sup>
Total Nickel	Influent <sup>e</sup> , µg/L	Monthly <sup>b</sup>	Grab <sup>c</sup>
Total Zinc	Influent <sup>e</sup> , µg/L	Monthly <sup>b</sup>	Grab <sup>c</sup>
Turbidity	Influent <sup>e</sup> , NTUs	Continuous <sup>a</sup>	Metered & Recorded
2,3,7,8-Tetra-Chlorodibenzo-P-Dioxin	Influent <sup>e</sup> , pg/L	One Time by May 15, 2009	Grab <sup>c</sup>
Flow	Final Effluent <sup>d</sup> , gpd	Continuous <sup>a</sup>	Metered & Recorded
Benzo (a) Pyrene	Final Effluent <sup>d</sup> , µg/L	Monthly <sup>b</sup>	Grab <sup>c</sup>
Total Arsenic	Final Effluent <sup>d</sup> , µg/L	Monthly <sup>b</sup>	Grab <sup>c</sup>
Total Copper	Final Effluent <sup>d</sup> , µg/L	Monthly <sup>b</sup>	Grab <sup>c</sup>
Total Cadmium	Final Effluent <sup>d</sup> , µg/L	Monthly <sup>b</sup>	Grab <sup>c</sup>
Total Lead	Final Effluent <sup>d</sup> , µg/L	Monthly <sup>b</sup>	Grab <sup>c</sup>
Total Nickel	Final Effluent <sup>d</sup> , µg/L	Monthly <sup>b</sup>	Grab <sup>c</sup>
Total Zinc	Final Effluent <sup>d</sup> , µg/L	Monthly <sup>b</sup>	Grab <sup>c</sup>
Turbidity	Final Effluent <sup>d</sup> , NTUs	Continuous <sup>a</sup>	Metered & Recorded
2,3,7,8-Tetra-	Final Effluent <sup>d</sup> , pg/L	One time by May 15,	Grab <sup>c</sup>

Parameter	Sample Point/Units	Minimum Sampling Frequency	Sample Type
Chlorodibenzo-P-Dioxin		2009	
pH	Final Effluent <sup>d</sup> , Standard Units	Continuous <sup>a</sup>	Metered & Recorded
Acute and Chronic WET Toxicity Characterization	Final Effluent <sup>d</sup>	See Sections S10. and S11.	Composite
<p>The Permittee must record and report the:</p> <ul style="list-style-type: none"> <li>Number of minutes the pH value measured below or above the permitted range for each day. Total minutes for the month. Periods when values were above and below the permitted range separately. Monthly instantaneous maximum and minimum pH.</li> </ul>			
<sup>a</sup> Continuous means uninterrupted except for brief calibration, lengths of time for power failure, or for unanticipated equipment repair or maintenance.			
<sup>b</sup> Monthly means once every calendar month during alternate weeks.			
<sup>c</sup> Grab means an individual sample collected over a fifteen (15) minute, or less, period.			
<sup>d</sup> Final Effluent means wastewater which is exiting, or has exited, the last treatment process or operation.			
<sup>e</sup> Influent samples must be taken before settling tanks.			
<p>See Appendix A for the required detection (DL) or quantitation (QL) levels.</p> <p>Report single analytical values below detection as “less than (detection level)” where (detection level) is the numeric value specified in attachment A.</p> <p>Report single analytical values between the agency-required detection and quantitation levels with qualifier code of j following the value.</p> <p>To calculate the average value (monthly average):</p> <ul style="list-style-type: none"> <li>Use the reported numeric value for all parameters measured between the agency-required detection value and the agency-required quantitation value.</li> <li>For values reported below detection, use one-half the detection value if the lab detected the parameter in another sample for the reporting period.</li> </ul> <p>For values reported below detection, use zero if the lab did not detect the parameter in another sample for the reporting period. If the Permittee is unable to obtain the required DL and QL in its effluent due to matrix effects, the Permittee must submit a matrix specific MDL and a QL to Ecology with appropriate laboratory documentation.</p>			

**B. Sampling and Analytical Procedures**

Samples and measurements taken to meet the requirements of this permit must represent the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality.

Sampling and analytical methods used to meet the monitoring requirements specified in this permit must conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136.

C. Flow Measurement

The Permittee must:

1. Select and use appropriate flow measurement, devices and methods consistent with accepted scientific practices.
2. Install, calibrate, and maintain these devices to ensure the accuracy of the measurements is consistent with the accepted industry standard and the manufacturer's recommendation for that type of device.
3. Use field measurement devices as directed by the manufacturer and do not use reagents beyond their expiration dates.
4. Calibrate these devices at the frequency recommended by the manufacturer.
5. Calibrate flow monitoring devices at a minimum frequency of at least one calibration per year.
6. Maintain calibration records for at least three years.

D. Laboratory Accreditation

The Permittee must ensure that all monitoring data required by Ecology is prepared by a laboratory registered or accredited under the provisions of chapter 173-50 Washington Administrative Code (WAC), *Accreditation of Environmental Laboratories*. Flow, temperature, settleable solids, conductivity, pH, and internal process control parameters are exempt from this requirement. The Permittee must obtain accreditation for conductivity and pH if it must receive accreditation or registration for other parameters.

**S3. REPORTING AND RECORDKEEPING REQUIREMENTS**

The Permittee must monitor and report in accordance with the following conditions. The falsification of information submitted to Ecology is a violation of the terms and conditions of this permit.

A. Reporting

The first monitoring period begins on the effective date of the permit. The Permittee must:

1. Submit monitoring results each month.
2. Summarize, report, and submit monitoring data obtained during each monitoring period on a Discharge Monitoring Report (DMR) form provided, or otherwise approved, by Ecology.

3. Submit DMR forms monthly whether or not the facility was discharging. If the facility did not discharge during a given monitoring period, submit the form as required with the words "NO DISCHARGE" entered in place of the monitoring results.
4. Ensure that DMR forms are postmarked or received by Ecology no later than the 15th day of the month following the completed monitoring period, unless otherwise specified in this permit.
5. Send report(s) to Ecology at:

Industrial Unit Permit Coordinator  
Department of Ecology  
Southwest Regional Office  
P.O. Box 47775  
Olympia, Washington 98504-7775

All laboratory reports providing data for organic and metal parameters must include the following information: sampling date, sample location, date of analysis, parameter name, CAS number, analytical method/ number, method detection limit (MDL) or laboratory quantitation limit (QL or ML), reporting units, and concentration detected. Analytical results from samples sent to a contract laboratory must have information on the chain of custody, the analytical method, QA/QC results, and documentation of accreditation for the parameter.

B. Records Retention

The Permittee must retain records of all monitoring information for a minimum of three years. Such information must include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. The Permittee must extend this period of retention during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by Ecology.

C. Recording of Results

For each measurement or sample taken, the Permittee must record the following information:

1. The date, exact place, method, and time of sampling or measurement.
2. The individual who performed the sampling or measurement.
3. The dates the analyses were performed.
4. The individual who performed the analyses.
5. The analytical techniques or methods used.
6. The results of all analyses.

D. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by Condition S2 of this permit, then the Permittee must include the results of such monitoring in the calculation and reporting of the data submitted in the Permittee's DMR.

E. Reporting Permit Violations

The Permittee must take the following actions when it violates or is unable to comply with any permit condition:

Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the noncompliance and correct the problem.

If applicable, immediately repeat sampling and analysis. Submit the results of any repeat sampling to Ecology within 30 days of sampling.

1. Twenty-four-hour Reporting

The Permittee must report the following occurrences of noncompliance by telephone, to Ecology at the telephone numbers listed above, within 24-hours from the time the Permittee becomes aware of any of the following circumstances:

- a. Any noncompliance that may endanger health or the environment, unless previously reported under subpart 1, above.
- b. Any unanticipated **bypass** that exceeds any effluent limit in the permit (See Part S4.B., "Bypass Procedures").
- c. Any **upset** that exceeds any effluent limit in the permit (See G.15, "Upset").
- d. Any violation of a maximum daily or instantaneous maximum discharge limit for any of the pollutants in Section S1.A of this permit.
- e. Any overflow prior to the treatment works, whether or not such overflow endangers health or the environment or exceeds any effluent limit in the permit.

2. Report Within Five Days

The Permittee must also provide a written submission within five days of the time that the Permittee becomes aware of any event required to be reported under subparts 1 or 2, above. The written submission must contain:

- a. A description of the noncompliance and its cause.
- b. The period of noncompliance, including exact dates and times.
- c. The estimated time noncompliance is expected to continue if it has not been corrected.

- d. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
- e. If the noncompliance involves an overflow prior to the treatment works, an estimate of the quantity (in gallons) of untreated overflow.

3. Waiver of Written Reports

Ecology may waive the written report required in subpart 3, above, on a case by case basis upon request if a timely oral report has been received.

4. All Other Permit Violation Reporting

The Permittee must report all permit violations, which do not require immediate or within 24-hours reporting, when it submits monitoring reports for S3.A ("Reporting"). The reports must contain the information listed in paragraph E.3, above. Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

5. Report Submittal

The Permittee must submit reports to the address listed in S3.

F. Other Reporting

The Permittee must report a spill of oil or hazardous materials in accordance with the requirements of Revised Code of Washington (RCW) 90.56.280 and chapter 173-303-145. You can obtain further instructions at the following website:  
<http://www.ecy.wa.gov/programs/spills/other/reportaspill.htm> .

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to Ecology, it must submit such facts or information promptly.

The Permittee must keep a copy of this permit at the facility and make it available upon request to Ecology inspectors.

**S4. OPERATION AND MAINTENANCE**

The Permittee must, at all times, properly operate and maintain all facilities or systems of treatment and control (and related appurtenances) which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

The Permittee must schedule any facility maintenance, which might require interruption of wastewater treatment and degrade effluent quality, during non-critical water quality periods and carry this maintenance out in a manner approved by Ecology.

A. Operations and Maintenance Manual

The Permittee must:

1. Prepare an Operations and Maintenance (O&M) Manual in accordance with 173-240-150 WAC and submit it to Ecology for approval by ~~July~~**May** ~~3015~~**2009**.
2. Review the O&M Manual at least annually and confirm this review by letter to Ecology by ~~Jul~~**May** ~~3015~~ of each year.
3. Submit to Ecology for review and approval substantial changes or updates to the O&M Manual whenever it incorporates them into the manual.
4. Keep the approved O&M Manual at the permitted facility.
5. Follow the instructions and procedures of this manual.

In addition to the requirements of WAC 173-240-150(1) and (2), the O&M manual must include:

1. Emergency procedures for plant shutdown and cleanup in event of wastewater system upset or failure.
2. Wastewater system maintenance procedures that contribute to the generation of process wastewater.
3. Any directions to maintenance staff when cleaning, or maintaining other equipment or performing other tasks which are necessary to protect the operation of the wastewater system (for example, defining maximum allowable discharge rate for draining a tank, blocking all floor drains before beginning the overhaul of a stationary engine.)
4. Wastewater sampling protocols and procedures for compliance with the sampling and reporting requirements in the wastewater discharge permit.
5. Minimum staffing adequate to operate and maintain the treatment processes and carry out compliance monitoring required by the permit
6. Treatment plant process control monitoring schedule.
7. Specify other items on case-by-case basis such as O&M for any pump stations, lagoon liners, etc.

B. Bypass Procedures

This permit prohibits a bypass which is the intentional diversion of waste streams from any portion of a treatment facility. Ecology may take enforcement action against a Permittee for a bypass unless one of the following circumstances (1, 2, or 3) applies.

1. Bypass for Essential Maintenance without the Potential to Cause Violation of Permit Limits or Conditions.

Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limits or other conditions of this permit, or adversely impact public health as determined by Ecology prior to the bypass. The Permittee must submit prior notice, if possible, at least ten days before the date of the bypass.

2. Bypass Which is Unavoidable, Unanticipated, and Results in Noncompliance of this Permit.

This bypass is permitted only if:

Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.

No feasible alternatives to the bypass exist, such as:

- The use of auxiliary treatment facilities.
- Retention of untreated wastes.
- Stopping production.
- Maintenance during normal periods of equipment downtime, but not if the Permittee should have installed adequate backup equipment in the exercise of reasonable engineering judgment to prevent a bypass.
- Transport of untreated wastes to another treatment facility or preventative maintenance), or transport of untreated wastes to another treatment facility.

Ecology is properly notified of the bypass as required in condition S3.E of this permit.

3. If bypass is anticipated and has the potential to result in noncompliance of this permit.
  - a. The Permittee must notify Ecology at least 30 days before the planned date of bypass. The notice must contain:
    - A description of the bypass and its cause.
    - An analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing.
    - A cost-effectiveness analysis of alternatives including comparative resource damage assessment.
    - The minimum and maximum duration of bypass under each alternative.

- A recommendation as to the preferred alternative for conducting the bypass.
  - The projected date of bypass initiation.
  - A statement of compliance with SEPA.
  - A request for modification of water quality standards as provided for in WAC 173-201A-410, if an exceedance of any water quality standard is anticipated.
  - Details of the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.
- b. For probable construction bypasses, the Permittee must notify Ecology of the need to bypass as early in the planning process as possible. The Permittee must consider the analysis required above during preparation of the engineering report or facilities plan and plans and specifications and must include these to the extent practical. In cases where the Permittee determines the probable need to bypass early, the Permittee must continue to analyze conditions up to and including the construction period in an effort to minimize or eliminate the bypass.
- c. Ecology will consider the following prior to issuing an administrative order for this type of bypass:
- If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
  - If feasible alternatives to bypass exist, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
  - If the Permittee planned and scheduled the bypass to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, Ecology will approve or deny the request. Ecology will give the public an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Ecology will approve a request to bypass by issuing an administrative order under RCW 90.48.120.

C. Duty to Mitigate

The Permittee is required to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

## **S5. APPLICATION FOR PERMIT RENEWAL**

The Permittee must submit an application for renewal of this permit by *Reserved for Issuance*

**S6. SOLID WASTES****A. Solid Waste Handling**

The Permittee must handle and dispose of all solid waste material in such a manner as to prevent its entry into state ground or surface water.

The plan must be submitted to Ecology for approval (RCW 90.48.080). A focus sheet on preparing a solid waste control plan can be found in <http://www.ecy.wa.gov/pubs/0710024.pdf>. In addition, the solid waste control plan should specifically address the handling and disposal of the solid/sludge generated from the groundwater/stormwater treatment system. The Solid Waste Handling plan should be submitted by **JulMay 30~~1~~, 2009**.

**B. Leachate**

The Permittee must not allow leachate from its solid waste material to enter state waters without providing all known, available and reasonable methods of treatment, nor allow such leachate to cause violations of the State Surface Water Quality Standards, Chapter 173-201A WAC, or the State Ground Water Quality Standards, Chapter 173-200 WAC. The Permittee must apply for a permit or permit modification as may be required for such discharges to state ground or surface waters.

**S7. ENGINEERING DOCUMENTS**

The Permittee must prepare and submit two copies of as-built plans and specifications to Ecology in accordance with chapter 173-240 WAC by **Jul~~ye~~ 30, 2009**.

**S8. SPILL PLAN**

The Permittee must:

1. Submit to Ecology a spill control plan for the prevention, containment, and control of spills or unplanned releases of pollutants by **JulMay 30~~1~~, 2009**.
2. Review the plan at least annually and update the Spill Plan as needed.
3. Send changes to the plan to Ecology.
4. Follow the plan and any supplements throughout the term of the permit.

The spill control plan must include the following:

1. A list of all oil and petroleum products and other materials used and/or stored on site, which when spilled, or otherwise released into the environment, designate as Dangerous (DW) or Extremely Hazardous Waste (EHW) by the procedures set forth in WAC 173-303-070. Include other materials used and/or stored on site which may become pollutants or cause pollution upon reaching state's waters.
2. A description of preventive measures and facilities (including an overall facility plot showing drainage patterns) which prevent, contain, or treat spills of these materials.

3. A description of the reporting system the Permittee will use to alert responsible managers and legal authorities in the event of a spill.
4. A description of operator training to implement the plan. The Permittee may submit plans and manuals required by 40 CFR Part 112, contingency plans required by Chapter 173-303 WAC, or other plans required by other agencies which meet the intent of this section.

**S9. BEST MANAGEMENT PRACTICES/ STORMWATER POLLUTION PREVENTION PLAN**

The Permittee must include Permit Condition S9. as part of the bid package for hiring a contractor to conduct construction at the site.

The Permittee must prepare and submit a pollution prevention plan by ~~Jul~~**May 15<sup>1</sup>**, 2009. The pollution prevention plan must specifically identify the construction methods the Permittee and its contractor will use to prevent discharge of untreated stormwater from the site. The plan should address means such as silt fencing, plugging the existing catch basins and berms to prevent discharge of untreated stormwater into Budd Inlet.

Stormwater must either infiltrate on site, or the Permittee must treat it with the on-site treatment system prior to discharge into Budd Inlet.

**BMPs for Storage of the Contaminated Soil**

The Permittee must properly store contaminated soil at the site during the construction project. The Permittee must not hose down the contained stockpile area to a storm drain or a conveyance to a storm drain or directly to the receiving water.

The pollution prevention plan must identify site specific Best Management Practices (BMPs) for the storage of contaminated soils site during construction to prevent discharge of untreated stormwater from the site. The following is a list of BMPs that the Permittee must evaluate and choose from to contain and address the run-on and run-off to and from the contaminated stock pile.

- **Pollutant Control Approach:** Provide impervious containment with berms, dikes, etc. and/or cover to prevent run-on and discharge of leachate pollutant(s) and TSS. (BMPs C123: Plastic Covering and C208: Triangular Silt Dike).
- **Applicable Structural Source Control BMP Options:** Choose, by what is appropriate to the site, one or more of the source control BMP options listed below for stockpiles greater than 5 cubic yards.
  - Store in a building or paved and bermed covered area.
  - Place temporary plastic sheeting (polyethylene, polypropylene, hypalon, or equivalent) over the material.

- Pave the area and install a stormwater drainage system. Place curbs or berms along the perimeter of the area to prevent the run-on of uncontaminated stormwater and to collect and convey runoff to treatment. Slope the paved area in a manner that minimizes the contact between stormwater (e.g., pooling) and leachable materials in compost, logs, bark, wood chips, etc.
- For large stockpiles that cannot be covered, implement containment practices at the perimeter of the site and at any catch basins as needed to prevent erosion and discharge of the stockpiled material offsite or to a storm drain. Ensure that contaminated stormwater is not discharged directly to catch basins without conveying through a treatment BMP.
- **Applicable Treatment BMP:** Convey contaminated stormwater from the stockpile area to a wet pond, wet vault, settling basin, media filter, or other appropriate treatment system depending on the contamination.
- **Recommended Additional Operational BMPs:**
  - Maintain drainage areas in and around storage of contaminated soil stock pile with a minimum slope of 1.5 percent to prevent pooling and minimize leachate formation. Areas should be sloped to drain stormwater to the perimeter where it can be collected, or to internal drainage “alleyways” where material is not stockpiled.
  - Sweep paved storage areas regularly for collection and disposal of loose solid materials.
  - If and when feasible, collect and recycle water-soluble materials (leachates) to the stockpile.
  - Stock cleanup materials, such as brooms, dustpans, and vacuum sweepers near the storage area.

## **S10. ACUTE TOXICITY**

### **A. Effluent Characterization**

1. As necessary Conduct acute toxicity testing on the final effluent twice each year for one year. Characterization should be conducted by ~~July~~**May 30, 2009** and ~~January~~**December 30, 2010**.
2. Submit a written reports to Ecology ~~September~~**July 30, 2009** —and ~~March~~**February 3028, 2010**.
3. Use a dilution series consisting of a minimum of five concentrations and a control.
4. Conduct the following two acute toxicity tests on each sample:

Acute Toxicity Tests	Species	Method
Fathead minnow 96-hour static-renewal test	<i>Pimephales promelas</i>	EPA-821-R-02-012
Daphnid 48-hour static test	<i>Ceriodaphnia dubia</i> , <i>Daphnia pulex</i> , or <i>Daphnia magna</i>	EPA-821-R-02-012

The Permittee has an effluent limit for acute toxicity if after one year of effluent characterization:

1. The median survival of any species in 100 percent effluent is below 80 percent.
2. Any one test of any species exhibits less than 65 percent survival in 100 percent effluent.

If the Permittee has an effluent limit for acute toxicity, the Permittee must immediately follow the instructions in Subsections B, C, D, E, and G. If the Permittee has no effluent limit for acute toxicity, then the Permittee must follow the instructions in Subsections F and G.

**B. Effluent Limit for Acute Toxicity**

**The effluent limit for acute toxicity is:**

**No acute toxicity detected in a test concentration representing the acute critical effluent concentration (ACEC).**

The ACEC equals 100 percent effluent.

**C. Compliance With the Effluent Limit for Acute Toxicity**

Compliance with the effluent limit for acute toxicity means the results of the testing specified in subsection D. show no statistically significant difference in survival between the control and the ACEC.

If the test results show a statistically significant difference in survival between the control and the ACEC, the test does not comply with the effluent limit for acute toxicity. The Permittee must then immediately conduct the additional testing described in subsection E. The Permittee will comply with the requirements of this section by meeting the requirements of subsection E.

The Permittee must determine the statistical significance by conducting a hypothesis test at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in survival between the control and the ACEC is less than 10 percent, the Permittee must conduct the hypothesis test at the 0.01 level of significance.

**D. Compliance Testing for Acute Toxicity**

The Permittee must:

1. Perform the acute toxicity tests with 100 percent effluent, the ACEC, and a control, or with a full dilution series.
2. Submit a written report of all test results to Ecology within 60 days after each sample date.

The Permittee must perform compliance tests twice each year, using each of the species and protocols listed below on a rotating basis:

Acute Toxicity Tests	Species	Method
Fathead minnow 96-hour static-renewal test	<i>Pimephales promelas</i>	EPA-821-R-02-012
Daphnid 48-hour static test	<i>Ceriodaphnia dubia</i> , <i>Daphnia pulex</i> , or <i>Daphnia magna</i>	EPA-821-R-02-012

E. Response to Noncompliance with the Effluent Limit for Acute Toxicity

If a toxicity test conducted under subsection D. determines a statistically significant difference in response between the ACEC and the control, using the statistical test described in subsection C., the Permittee must begin additional testing within one week from the time of receiving the test results. The Permittee must:

1. Conduct one additional test each week for four consecutive weeks, using the same test and species as the failed compliance test.
2. Test at least five effluent concentrations and a control to determine appropriate point estimates. One of these effluent concentrations must equal the ACEC. The results of the test at the ACEC will determine compliance with the effluent limit for acute toxicity as described in Subsection C.
3. Return to the original monitoring frequency in Subsection D after completion of the additional compliance monitoring.

**Anomalous test results:** If a toxicity test conducted under subsection D. indicates noncompliance with the acute toxicity limit and the Permittee believes that the test result is anomalous, the Permittee may notify Ecology that the compliance test result may be anomalous. The Permittee may take one additional sample for toxicity testing and wait for notification from Ecology before completing the additional testing. The Permittee must submit the notification with the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous.

If Ecology determines that the test result was not anomalous, the Permittee must complete all of the additional monitoring required in this subsection. Or,

If the one additional sample fails to comply with the effluent limit for acute toxicity, then the Permittee must complete all of the additional monitoring required in this subsection. Or,

If Ecology determines that the test result was anomalous, the one additional test result will replace the anomalous test result.

If all of the additional testing complies with the permit limit, the Permittee must submit a report to Ecology on possible causes and preventive measures for the transient toxicity event, which triggered the additional compliance monitoring. This report must include a search of all pertinent and recent facility records, including:

1. Operating records
2. Monitoring results
3. Inspection records
4. Spill reports
5. Weather records
6. Production records
7. Raw material purchases
8. Pretreatment records, etc.

If the additional testing shows violation of the acute toxicity limit, the Permittee must submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to Ecology within 60 days after the sample date (WAC 173-205-100(2)).

F. Testing When There Is No Permit Limit for Acute Toxicity

The Permittee must:

1. Conduct acute toxicity testing on final effluent once in the last summer and once in the last winter prior to submission of the application for permit renewal.
2. Submit the results to Ecology with the permit renewal application.
3. Conduct acute toxicity testing on a series of at least five concentrations of effluent, including 100 percent effluent, and a control.
4. Use each of the following species and protocols for each acute toxicity test:

Acute Toxicity Tests	Species	Method
Fathead minnow 96-hour static-renewal test	<i>Pimephales promelas</i>	EPA-821-R-02-012
Daphnid 48-hour static test	<i>Ceriodaphnia dubia</i> , <i>Daphnia pulex</i> , or <i>Daphnia magna</i>	EPA-821-R-02-012

**G. Sampling and Reporting Requirements**

1. The Permittee must submit all reports for toxicity testing in accordance with the most recent version of Ecology's Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. Reports must contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data in electronic format for entry into Ecology's database, then the Permittee must send the data to Ecology along with the test report, bench sheets, and reference toxicant results.
2. The Permittee must collect 24-hour composite effluent samples for toxicity testing. The Permittee must cool the samples to 0 - 6 degrees Celsius during collection and send them to the lab immediately upon completion. The lab must begin the toxicity testing as soon as possible but no later than 36 hours after sampling was completed.
3. The laboratory must conduct water quality measurements on all samples and test solutions for toxicity testing, as specified in the most recent version of Ecology's Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*.
4. All toxicity tests must meet quality assurance criteria and test conditions specified in the most recent versions of the EPA methods listed in subsection C. and Ecology of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If Ecology determines any test results to be invalid or anomalous, the Permittee must repeat the testing with freshly collected effluent.
5. The laboratory must use control water and dilution water meeting the requirements of the EPA methods listed in subsection A. or pristine natural water of sufficient quality for good control performance.
6. The Permittee must conduct whole effluent toxicity tests on an unmodified sample of final effluent.
7. The Permittee may choose to conduct a full dilution series test during compliance testing in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the acute critical effluent concentration (ACEC). The ACEC equals 100 percent effluent.
8. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing must comply with the acute statistical power standard of 29 percent as defined in WAC 173-205-020. If the test does not meet the power standard, the Permittee must repeat the test on a fresh sample with an increased number of replicates to increase the power.
9. Reports of individual characterization or compliance test results must be submitted to Ecology within 60 days after each sample date.

10. The Acute Toxicity Summary Report must be submitted to Ecology by 120 days after the last date

## S11. CHRONIC TOXICITY

### A. Effluent Characterization

The Permittee must:

1. Conduct chronic toxicity testing on the final effluent twice each year for one year. Characterization should be conducted by ~~July~~~~May~~ **30, 2009** and ~~January~~~~February~~ **30**~~28~~, 2010.
2. Submit written reports to Ecology by ~~September~~~~July~~ **30, 2009**~~30~~ and ~~March~~~~February~~ **30**~~28~~, 2010. .
3. Conduct chronic toxicity testing during effluent characterization on a series of at least five concentrations of effluent and a control. This series of dilutions must include the acute critical effluent concentration (ACEC). The ACEC equals 100 percent effluent.

The Permittee must conduct the following two chronic toxicity tests on each sample:

Freshwater Chronic Test	Species	Method
Fathead minnow survival and growth	<i>Pimephales promelas</i>	EPA-821-R-02-013
Water flea survival and reproduction	<i>Ceriodaphnia dubia</i>	EPA-821-R-02-013

The Permittee has an effluent limit for chronic toxicity if after one year of effluent characterization: any test shows a significant difference between the control and the ACEC at the 0.05 level of significance using hypothesis testing (Appendix H, EPA/600/4-89/001).

If the Permittee has an effluent limit for chronic toxicity, the Permittee must immediately follow the instructions in subsections B, C, D, E and G. If the Permittee has no effluent limit for chronic toxicity, then the Permittee must follow the instructions in subsections F and G.

### B. Effluent Limit for Chronic Toxicity

**The effluent limit for chronic toxicity is:**

**No toxicity detected in a test concentration representing the chronic critical effluent concentration (CCEC).**

The CCEC equals 100 percent effluent.

C. Compliance With the Effluent Limit for Chronic Toxicity

Compliance with the effluent limit for chronic toxicity means the results of the testing specified in subsection D. show no statistically significant difference in response between the control and the CCEC.

If the test results show a statistically significant difference in response between the control and the CCEC, the test does not comply with the effluent limit for chronic toxicity. The Permittee must then immediately conduct the additional testing described in subsection E. The Permittee will comply with the requirements of this section by meeting the requirements of subsection E.

The Permittee must determine the statistical significance by conducting a hypothesis test at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in response between the control and the CCEC is less than 20 percent, the Permittee must conduct the hypothesis test at the 0.01 level of significance.

Ecology will re-evaluate the need for the chronic toxicity limit in future permits. Therefore, the Permittee must also conduct this same hypothesis test (Appendix H, EPA/600/4-89/001) to determine whether a statistically significant difference in response exists between the acute critical effluent concentration (ACEC) and the control.

D. Compliance Testing for Chronic Toxicity

The Permittee must:

- Perform the chronic -toxicity tests using the CCEC, the ACEC, and a control, or with a full dilution series.
- Submit a written report of all test results to Ecology within 60 days after each sample date. This written report must include the results of hypothesis testing conducted as described in subsection C. using both the ACEC and CCEC versus the control.
- Perform compliance tests biannually using the following species on a rotating basis and the most recent version of the following protocols:

Freshwater Chronic Test	Species	Method
Fathead minnow	<i>Pimephales promelas</i>	EPA-821-R-02-013
Water flea	<i>Ceriodaphnia dubia</i>	EPA-821-R-02-013

E. Response to Noncompliance With the Effluent Limit for Chronic Toxicity

If a toxicity test conducted under subsection D. determines a statistically significant difference in response between the CCEC and the control using the statistical test described in subsection C., the Permittee must begin additional testing within one week from the time of receiving the test results. The Permittee must:

1. Conduct additional testing each month for three consecutive months using the same test and species as the failed compliance test.
2. Use a series of at least five effluent concentrations and a control to determine appropriate point estimates. One of these effluent concentrations must equal the CCEC. The results of the test at the CCEC will determine compliance with the effluent limit for acute toxicity as described in subsection B.
3. Return to the original monitoring frequency in subsection C. after completion of the additional compliance monitoring.

**Anomalous test results:** If a toxicity test conducted under subsection D. indicates noncompliance with the acute toxicity limit and the Permittee believes that the test result is anomalous, the Permittee may notify Ecology that the compliance test result may be anomalous. The Permittee may take one additional sample for toxicity testing and wait for notification from Ecology before completing the additional testing. The Permittee must submit the notification with the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous.

If Ecology determines that the test result was not anomalous, the Permittee must complete all of the additional monitoring required in this subsection. Or,

If the one additional sample fails to comply with the effluent limit for acute toxicity, then the Permittee must complete all of the additional monitoring required in this subsection. Or,

If Ecology determines that the test result was anomalous, the one additional test result will replace the anomalous test result.

If all of the additional testing complies with the permit limit, the Permittee must submit a report to Ecology on possible causes and preventive measures for the transient toxicity event, which triggered the additional compliance monitoring. This report must include a search of all pertinent and recent facility records, including:

1. Operating records
2. Monitoring results
3. Inspection records
4. Spill reports
5. Weather records
6. Production records
7. Raw material purchases
8. Pretreatment records, etc.

If the additional testing shows violation of the acute toxicity limit, the Permittee must submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to Ecology within 60 days after the sample date (WAC 173-205-100(2)).

F. Testing When There Is No Permit Limit for Chronic Toxicity

The Permittee must:

1. Conduct chronic toxicity testing on final effluent once in the last summer and once in the last winter prior to submission of the application for permit renewal.
2. Submit the results to Ecology with the permit renewal application.
3. Conduct chronic toxicity testing on a series of at least five concentrations of effluent and a control. This series of dilutions must include the acute critical effluent concentration (ACEC). The ACEC equals 100 percent effluent.
4. Compare the ACEC to the control using hypothesis testing at the 0.05 level of significance as described in Appendix H, EPA/600/4-89/001.
5. Perform chronic toxicity tests with all of the following species and the most recent version of the following protocols:

<b>Freshwater Chronic Test</b>	<b>Species</b>	<b>Method</b>
Fathead minnow	<i>Pimephales promelas</i>	EPA-821-R-02-013
Water flea	<i>Ceriodaphnia dubia</i>	EPA-821-R-02-013

G. Sampling and Reporting Requirements

1. The Permittee must submit all reports for toxicity testing in accordance with the most recent version of Ecology's Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. Reports must contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data in electronic format for entry into Ecology's database, then the Permittee must send the data to Ecology along with the test report, bench sheets, and reference toxicant results.
2. The Permittee must collect 24-hour composite effluent samples for toxicity testing. The Permittee must cool the samples to 0 - 6 degrees Celsius during collection and send them to the lab immediately upon completion. The lab must begin the toxicity testing as soon as possible but no later than 36 hours after sampling was completed.
3. The laboratory must conduct water quality measurements on all samples and test solutions for toxicity testing, as specified in the most recent version of Ecology's Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*.

4. All toxicity tests must meet quality assurance criteria and test conditions specified in the most recent versions of the EPA methods listed in subsection C. and the Ecology's Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If Ecology determines any test results to be invalid or anomalous, the Permittee must repeat the testing with freshly collected effluent.
5. The laboratory must use control water and dilution water meeting the requirements of the EPA methods listed in subsection C. or pristine natural water of sufficient quality for good control performance.
6. The Permittee must conduct whole effluent toxicity tests on an unmodified sample of final effluent.
7. The Permittee may choose to conduct a full dilution series test during compliance testing in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the CCEC and the ACEC. The CCEC and the ACEC may either substitute for the effluent concentrations that are closest to them in the dilution series or be extra effluent concentrations. The CCEC equals 100 percent effluent. The ACEC equals 100 percent effluent.
8. All whole effluent toxicity tests that involve hypothesis testing must comply with the chronic statistical power standard of 39 percent as defined in WAC 173-205-020. If the test does not meet the power standard, the Permittee must repeat the test on a fresh sample with an increased number of replicates to increase the power.
9. Reports of individual characterization or compliance test results must be submitted to Ecology within 60 days after each sample date.
10. The Chronic Toxicity Summary Report must be submitted to Ecology by 120 days after the last test.

## **S12. BUDD INLET TURBIDITY STUDY WORK PLAN**

The Permittee must collect receiving water (Budd Inlet) turbidity data to provide information to determine if the effluent will impact the receiving water. This information will also assist Ecology to determine if the discharge causes increase of 0.5 NTU or greater in the receiving stream (Tier II (WAC 173-201A-320) analysis, WAC 173-201A-320 (3)(e)).

The Permittee must:

1. Submit a work plan that outlines how it will sample receiving water background turbidity measurements plan by ~~Jul~~**May 30~~15~~, 2009**.
2. Conduct all sampling and analysis in accordance with the guidelines given in "Guidelines and Specifications for preparing Quality Assurance Project Plans, Ecology Publication 91-16."
3. Conduct sampling for 12 consecutive months after the discharge starts.

4. Submit the measurement results by ~~September~~**June 15**, 2010 to Ecology.

**GENERAL CONDITIONS****G1. SIGNATORY REQUIREMENTS**

A. All applications, reports, or information submitted to Ecology must be signed and certified.

1. In the case of corporations, by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
2. In the case of a partnership, by a general partner.
3. In the case of sole proprietorship, by the proprietor.
4. In the case of a municipal, state, or other public facility, by either a principal executive officer or ranking elected official.

Applications for permits for domestic wastewater facilities that are either owned or operated by, or under contract to, a public entity shall be submitted by the public entity.

B. All reports required by this permit and other information requested by Ecology must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to Ecology.
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

- C. Changes to authorization. If an authorization under paragraph B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph B.2 above must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.
- D. Certification. Any person signing a document under this section must make the following certification:

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

## **G2. RIGHT OF INSPECTION AND ENTRY**

The Permittee must allow an authorized representative of Ecology, upon the presentation of credentials and such other documents as may be required by law:

- A. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit.
- B. To have access to and copy - at reasonable times and at reasonable cost - any records required to be kept under the terms and conditions of this permit.
- C. To inspect - at reasonable times - any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.
- D. To sample or monitor - at reasonable times - any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

## **G3. PERMIT ACTIONS**

This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the Permittee) or upon Ecology's initiative. However, the permit may only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR 122.62, 122.64 or WAC 173-220-150 according to the procedures of 40 CFR 124.5.

- A. The following are causes for terminating this permit during its term, or for denying a permit renewal application:

1. Violation of any permit term or condition.
2. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.
3. A material change in quantity or type of waste disposal.
4. A determination that the permitted activity endangers human health or the environment or contributes to water quality standards violations and can only be regulated to acceptable levels by permit modification or termination [40 CFR part 122.64(3)].
5. A change in any condition that requires either a temporary or permanent reduction or elimination of any discharge or sludge use or disposal practice controlled by the permit [40 CFR part 122.64(4)].
6. Nonpayment of fees assessed pursuant to RCW 90.48.465.
7. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.

B. The following are causes for modification but not revocation and reissuance except when the Permittee requests or agrees:

1. A material change in the condition of the waters of the state.
2. New information not available at the time of permit issuance that would have justified the application of different permit conditions.
3. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.
4. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.
5. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR Part 122.62.
6. Ecology has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.
7. Incorporation of an approved local pretreatment program into a municipality's permit.

C. The following are causes for modification or alternatively revocation and reissuance:

1. Cause exists for termination for reasons listed in A1 through A7, of this section, and Ecology determines that modification or revocation and reissuance is appropriate.
2. Ecology has received notification of a proposed transfer of the permit. A permit may also be modified to reflect a transfer after the effective date of an automatic

transfer (General Condition G7) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new Permittee.

**G4. REPORTING PLANNED CHANGES**

The Permittee must, as soon as possible, but no later than 60 days prior to the proposed changes, give notice to Ecology of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in: 1) the permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b); 2) a significant change in the nature or an increase in quantity of pollutants discharged; or 3) a significant change in the Permittee's sludge use or disposal practices. Following such notice, and the submittal of a new application or supplement to the existing application, along with required engineering plans and reports, this permit may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation.

**G5. PLAN REVIEW REQUIRED**

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications must be submitted to Ecology for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications must be submitted at least 180 days prior to the planned start of construction unless a shorter time is approved by Ecology. Facilities must be constructed and operated in accordance with the approved plans.

**G6. COMPLIANCE WITH OTHER LAWS AND STATUTES**

Nothing in this permit must be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

**G7. TRANSFER OF THIS PERMIT**

In the event of any change in control or ownership of facilities from which the authorized discharge emanate, the Permittee must notify the succeeding owner or controller of the existence of this permit by letter, a copy of which must be forwarded to Ecology.

**A. Transfers by Modification**

Except as provided in paragraph B below, this permit may be transferred by the Permittee to a new owner or operator only if this permit has been modified or revoked and reissued under 40 CFR 122.62(b)(2), or a minor modification made under 40 CFR 122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

**B. Automatic Transfers**

This permit may be automatically transferred to a new Permittee if:

1. The Permittee notifies Ecology at least 30 days in advance of the proposed transfer date.

2. The notice includes a written agreement between the existing and new Permittee's containing a specific date transfer of permit responsibility, coverage, and liability between them.
3. Ecology does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under the subparagraph may also be minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement.

**G8. REDUCED PRODUCTION FOR COMPLIANCE**

The Permittee, in order to maintain compliance with its permit, must control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

**G9. REMOVED SUBSTANCES**

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters must not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

**G10. DUTY TO PROVIDE INFORMATION**

The Permittee must submit to Ecology, within a reasonable time, all information which Ecology may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee must also submit to Ecology upon request, copies of records required to be kept by this permit.

**G11. OTHER REQUIREMENTS OF 40 CFR**

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

**G12. ADDITIONAL MONITORING**

Ecology may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

**G13. PAYMENT OF FEES**

The Permittee must submit payment of fees associated with this permit as assessed by Ecology.

**G14. PENALTIES FOR VIOLATING PERMIT CONDITIONS**

Any person who is found guilty of willfully violating the terms and conditions of this permit is deemed guilty of a crime, and upon conviction thereof will be punished by a fine of up to ten thousand dollars (\$10,000) and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs is a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit must incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars (\$10,000) for every such violation. Each and every such violation is a separate and distinct offense, and in case of a continuing violation, every day's continuance is deemed to be a separate and distinct violation.

**G15. UPSET**

Definition – “Upset” means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limits because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limits if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that: (1) an upset occurred and that the Permittee can identify the cause(s) of the upset; (2) the permitted facility was being properly operated at the time of the upset; (3) the Permittee submitted notice of the upset as required in condition S3.E; and (4) the Permittee complied with any remedial measures required under S4.C of this permit.

In any enforcement proceedings the Permittee seeking to establish the occurrence of an upset has the burden of proof.

**G16. PROPERTY RIGHTS**

This permit does not convey any property rights of any sort, or any exclusive privilege.

**G17. DUTY TO COMPLY**

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

**G18. TOXIC POLLUTANTS**

The Permittee must comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

**G19. PENALTIES FOR TAMPERING**

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit will, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this Condition, punishment

will be a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four years, or by both.

**G20. REPORTING REQUIREMENTS APPLICABLE TO EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURAL DISCHARGERS**

The Permittee belonging to the categories of existing manufacturing, commercial, mining, or silviculture must notify Ecology as soon as they know or have reason to believe:

- A. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following “notification levels:”
  - 1. One hundred micrograms per liter (100 µg/L).
  - 2. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony.
  - 3. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
  - 4. The level established by the Director in accordance with 40 CFR 122.44(f).
- B. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following “notification levels:”
  - 1. Five hundred micrograms per liter (500µg/L).
  - 2. One milligram per liter (1 mg/L) for antimony.
  - 3. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
  - 4. The level established by the Director in accordance with 40 CFR 122.44(f).

**G21. COMPLIANCE SCHEDULES**

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date.

**APPENDIX A**  
**EFFLUENT CHARACTERIZATION FOR WASHINGTON STATE PRIORITY TOXIC CHEMICALS**

<b>EPA 307(A) REF. #</b>	<b>Pollutant &amp; CAS No. (if available)</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL)<sup>1,2</sup> µg/L unless specified</b>	<b>Quantitation Level (QL)<sup>1,2</sup> µg/L unless specified</b>	<b>Lowest Criteria Values µg/L unless specified</b>
<b>Conventionals</b>					
	Biochemical Oxygen Demand	405.1		2 mg/L	
	Chemical Oxygen Demand	410.1			
	Total Organic Carbon	5310 BCD		1 mg/L	
	Total Suspended Solids	2540 D		10 mg/L	
	Total Ammonia (as N)	4500-NH3- H			
	Flow	Calibrated device			
	Dissolved oxygen	4500-OC			
	Temperature (max. 7-day avg.)	Analog recorder or Use micro- recording devices known as thermistors			
	pH	150.1			
<b>Nonconventionals</b>					
	Bromide (24959-67-9)	4110 B	100	400	
	Chlorine, Total Residual	4500 Cl G	10.0	40.0	7.5
	Color				
	Fecal Coliform				
	Fluoride (16984-48-8)	4500-F E	25	100	
	Nitrate-Nitrite (as N)	4500-NO2- I	2.5	10	10,000
	Nitrogen, Total Organic (as N)	4500-NO3- B	6.3	25	
	Ortho-Phosphorus (PO <sub>4</sub> as P)	4500-P G	0.8	3.0	
	Phosphorus, Total (as P)	200.8	0.25	1.0	
	Oil and Grease	1664A	1250	5,000	
	Radioactivity				
	Sulfate (as mg/l SO <sub>4</sub> )	375.2	750	3,000	

EPA 307(A) REF. #	Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL) <sup>1,2</sup> µg/L unless specified	Quantitation Level (QL) <sup>1,2</sup> µg/L unless specified	Lowest Criteria Values µg/L unless specified
	Sulfide (as mg/l S)	376.1	250	1000	2.0
	Sulfite (as mg/l SO <sub>3</sub> )	4500-SO3B	500	2,000	
	Surfactants	5540 C	2.5	10	
	Total dissolved solids	2540 D			500 mg/L <sup>16</sup>
	Aluminum, Total (7429-90-5)	200.8	0.15	0.6	750
	Barium Total (7440-39-3)	200.8	0.5	2.0	
	Boron Total (7440-42-8)	200.8(mod)	1.0	4.0	
	Cobalt, Total (7440-48-4)	200.8	0.03	0.12	
	Iron, Total (7439-89-4)	200.8	12.5	50	300
	Magnesium, Total (7439-95-4)	200.8(mod)	1.0	4.0	
	Molybdenum, Total (7439-98-7)	200.8(mod)	0.1	0.4	
	Manganese, Total (7439-96-5)	200.8(mod)	0.06	0.24	50
	Tin, Total (7440-31-5)	200.8(mod)	0.04	0.16	
	Titanium, Total (7440-32-6)	200.8(mod)	0.04	0.16	
<b>Metals, Cyanide &amp; Total Phenols</b>					
114	Antimony, Total (Inorganic) (7440-36-0)	200.8	0.08	0.3	14 <sup>5</sup>
115	Arsenic, Total (dissolved) (7440-38-2)	200.8	0.9	3.6	36 <sup>7</sup>
117	Beryllium, Total (7440-43-9)	200.8	0.1	0.4	4 <sup>8</sup>
118	Cadmium, Total (7440-43-9)	200.8	0.1	0.4	0.37 <sup>3</sup>
	Chromium (hex) dissolved (185-402-99)	200.8	0.4	1.6	10 <sup>7</sup>
119	Chromium, Total (Tri) (7440-47-3)	200.8	0.07	0.28	57.2 <sup>3</sup>
120	Copper, Total (7440-50-8)	200.8	0.03	0.12	3.1 <sup>3</sup>
122	Lead, Total (7439-92-1)	200.8	0.08	0.32	0.54 <sup>3</sup>
123	Mercury, Total (7439-97-6)	1631E	0.0001	0.0005	0.012 <sup>7</sup>
124	Nickel, Total (7440-02-0)	200.8	0.2	0.8	8.2 <sup>3</sup>
125	Selenium, Total (7782-49-2)	200.8	1.3	5.2	5 <sup>7</sup>
126	Silver, Total (7440-22-4)	200.8	0.05	0.2	0.32 <sup>3</sup>
127	Thallium, Total (7440-28-0)	200.8	0.09	0.36	1.7 <sup>5</sup>
PSP	Tributyltin (688-73-3)	GC/MS <sup>12</sup>	0.001	0.004	0.0074 <sup>4</sup>
128	Zinc, Total (7440-66-6)	200.8	0.3	1.0	32.3 <sup>3</sup>

EPA 307(A) REF. #	Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL) <sup>1,2</sup> µg/L unless specified	Quantitation Level (QL) <sup>1,2</sup> µg/L unless specified	Lowest Criteria Values µg/L unless specified
121 PSP	Cyanide, Total (7440-66-6) Phenols, Total	335.4 420.1	1.3 12.5	5 50	1.0 <sup>7</sup> 300 <sup>9</sup>
<b>Dioxin</b>					
129	2,3,7,8-Tetra-Chlorodibenzo-P-Dioxin (176-40-16)	1613B	1.3 pg/L	5 pg/L	0.000000013 <sup>5</sup>
<b>Volatile Compounds</b>					
002	Acrolein (107-02-8)	624	12.5QL	50	320/780 <sup>5</sup>
003	Acrylonitrile (107-13-1)	603	0.5	2.0	0.059/0.66 <sup>5</sup>
004	Benzene (71-43-2)	624	0.07	0.28	5.0 <sup>8</sup>
018	Bis(2-Chloroethyl)ether (111-44-4)	611/625	0.25	1.0	0.031 <sup>5</sup>
042	Bis(2-Chloroisopropyl) ether (108-60-1)	611/625	0.03	0.10	1400 <sup>5</sup>
047	Bromoform (75-25-2)	624	4.7	19.0	4.3 <sup>5</sup>
006	Carbon tetrachloride (108-90-7)	624/601 or SM6230B	0.12	0.5	0.25 <sup>5</sup>
007	Chlorobenzene (108-90-7)	624	6.0	24.0	680 <sup>5</sup>
016	Chloroethane (75-00-3)	624/601	0.52	2.0	
019	2-Chloroethylvinyl Ether (110-75-8)	624	50 QL		3540 <sup>10</sup>
023	Chloroform (67-66-3)	624 or SM6210B	1.6	6.4	5.7 <sup>5</sup>
051	Dibromochloromethane (124-48-1)	624	0.09	0.36	0.41 <sup>5</sup>
048	Dichlorobromomethane (75-27-4)	SM6200B	0.112	0.45	0.27 <sup>5</sup>
013	1,1-Dichloroethane (75-34-3)	624	4.7	18.8	
010	1,2-Dichloroethane (107-06-2)	601	0.03	0.12	0.38 <sup>5</sup>
029	1,1-Dichloroethylene (75-35-4)	SM6200C	0.035	0.14	0.057 <sup>5</sup>
032	1,2-Dichloropropane (78-87-5)	624	6	24	3 <sup>13</sup>
033	1,3-dichloropropylene (mixed isomers) (542-75-6)	624	5	20	10 <sup>5</sup>
038	Ethylbenzene (100-41-4)	624	7.2	29.0	3100 <sup>5</sup>
046	Methyl bromide (74-83-9) (Bromomethane)	624/601	1.2	4.8	48 <sup>5</sup>
045	Methyl chloride (74-87-3) (Chloromethane)	601	0.08	0.32	270000 <sup>13</sup>
044	Methylene chloride (75-09-2)	624	2.8	11.2	4.7 <sup>5</sup>

<b>EPA 307(A) REF. #</b>	<b>Pollutant &amp; CAS No. (if available)</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL)<sup>1,2</sup> µg/L unless specified</b>	<b>Quantitation Level (QL)<sup>1,2</sup> µg/L unless specified</b>	<b>Lowest Criteria Values µg/L unless specified</b>
015	1,1,2,2-Tetrachloroethane (79-34-5)	601	0.03	0.12	0.17 <sup>5</sup>
085	Tetrachloroethylene (127-18-4)	SM6200B	0.047	0.19	0.80 <sup>5</sup>
086	Toulene (108-88-3)	624	6	24	6800 <sup>5</sup>
030	1,2-Trans-Dichloroethylene (156-60-5) (Ethylene dichloride)	624	1.6	6.4	700 <sup>4</sup>
011	1,1,1-Trichloroethane (71-55-6)	624	3.8	15.2	200 <sup>8</sup>
014	1,1,2-Trichloroethane (79-00-5)	601	0.02	0.08	0.6 <sup>5</sup>
087	Trichloroethylene (79-01-6)	624	1.9	7.6	2.7 <sup>5</sup>
	Trichlorofluoromethane (75-69-4)	624	0.06	0.24	-
088	Vinyl chloride (75-01-4)	624/SM6200B	0.12	0.48	2 <sup>5</sup>
<b>Acid Compounds</b>					
PSP	Bisphenol A (80-05-7)	625	0.3	1.2	0.9 <sup>13</sup>
024	2-Chlorophenol (95-57-8)	625	3.3	13.2	81 <sup>4</sup>
031	2,4-Dichlorophenol (120-83-2)	625	2.7	10.8	93 <sup>5</sup>
034	2,4-Dimethylphenol (105-67-9)	625	2.7	10.8	380 <sup>4</sup>
060	4,6-dinitro-o-cresol (534-52-1) (2- methyl-4,6,-dinitrophenol)	625/1625B	5	20	13.4 <sup>5</sup>
059	2,4 dinitrophenol (51-28-5)	625	42	168	70 <sup>5</sup>
057	2-Nitrophenol (88-75-5)	625	3.6	14.4	450 <sup>13</sup>
058	4-nitrophenol (100-02-7)	625	2.4	9.6	600 <sup>13</sup>
PSP	Nonylphenol, total (104-40-5)	625	0.9	5.0	7
022	Parachlorometa cresol (59-50-7) (4- chloro-3-methylphenol)	625	3.0	12.0	-
064	Pentachlorophenol (87-86-5)	604 (ECD)	0.005	0.021 <sup>11</sup>	0.28 <sup>5</sup>
065	Phenol (108-95-2)	625	1.5	6.0	21000 <sup>5</sup>
021	2,4,6-Trichlorophenol (88-06-2)	604(ECD)	0.58	2.3	2.1 <sup>5</sup>
<b>Base/Neutral Compounds</b>					
001	Acenaphthene (83-32-9)	625	1.9	7.6	670 <sup>6</sup>
077	Acenaphthylene (208-96-8)	625	3.5	14.0	132000 <sup>13</sup>
078	Anthracene (120-12-7)	625	1.9	7.6	9600 <sup>5</sup>
005	Benzidine (92-87-5)	605	0.08	0.32	0.00012 <sup>5</sup>
067	Benzyl butyl phthalate (85-68-7)	625	2.5	10.0	1500

EPA 307(A) REF. #	Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL) <sup>1,2</sup> µg/L unless specified	Quantitation Level (QL) <sup>1,2</sup> µg/L unless specified	Lowest Criteria Values µg/L unless specified
072	Benzo(a)anthracene (56-55-3)	610	0.013	0.05	0.0028 <sup>5</sup>
PBT	Benzo(j)fluoranthene (205-82-3)	610M/625M	0.02	0.08	-
PBT	Benzo(r,s,t)pentaphene (189-55-9)	610M/625M	0.02	0.08	
073	Benzo(a)pyrene (50-32-8)	610/625	0.023	0.09	0.0028/0.031 <sup>5</sup>
074	3,4-benzofluoranthene (Benzo(b)fluoranthene) (205-99-2)	610/625	0.018	0.07	
075	11,12-benzofluoranthene (Benzo(k)fluoranthene) (207-08-9)	610/625	0.017	0.07	0.0028/0.031 <sup>5</sup>
079	Benzo(ghi)Perylene (191-24-2)	610/625	0.076	0.30	0.1 <sup>13</sup>
043	Bis(2-chloroethoxy)methane (111-91-1)	625	5.3	21.2	92000 <sup>13</sup>
018	Bis(2-chloroethyl)ether (111-44-4)	611/625	0.3	1.2	0.031 <sup>5</sup>
042	Bis(2-chloroisopropyl)ether (108-60-1)	625	5.3	21.2	1400 <sup>5</sup>
066	Bis(2-ethylhexyl)phthalate (117-81-7)	625	2.5	10.0	1.8 <sup>5</sup>
070	Butyl benzyl phthalate	625	0.25	1.0	1500
041	4-Bromophenyl phenyl ether (101-55-3)	625	1.9	7.6	180 <sup>13</sup>
020	2-Chloronaphthalene (91-58-7)	625	1.9	7.6	1000 <sup>6</sup>
040	4-Chlorophenyl phenyl ether (7005-72-3)	625	4.2	16.8	365 <sup>13</sup>
076	Chrysene (218-01-9)	610/625	0.15	0.6	0.0028 <sup>5</sup>
PSP	7H-Dibenzo(c,g)carazole (194-59-2)	610M/625M	0.25	1.0	-
PBT	Dibenzo (a,j)acridine (224-42-0)	610M/625M	2.5	10.0	-
PBT	Dibenzo (a,h)acridine (226-36-8)	610M/625M	2.5	10.0	-
082	Dibenzo(a-h)anthracene (53-70-3) (1,2,5,6-dibenzanthracene)	625	2.5	10.0	2700 <sup>5</sup>
PBT	Dibenzo(a,e)pyrene (192-65-4)	610M/625M	2.5	10.0	-
PBT	Dibenzo(a,h)pyrene (189-64-0)	625M	2.5	10.0	
025	1,2-Dichlorobenzene (95-50-1)	625	1.9	7.6	2700 <sup>5</sup>
026	1,3-Dichlorobenzene (541-73-1)	625	1.9	7.6	400 <sup>5</sup>
027	1,4-Dichlorobenzene (106-46-7)	625	4.4	17.6	400 <sup>5</sup>
028	3,3'-Dichlorobenzidine (91-94-1)	605/625	0.13	0.52	0.04 <sup>5</sup>
PSP	1,2-Dichloropropane (788-7-5)	624	0.15	0.6	0.50 <sup>6</sup>
070	Diethyl phthalate (84-66-2)	625	1.9	7.6	23000 <sup>5</sup>

EPA 307(A) REF. #	Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL) <sup>1,2</sup> µg/L unless specified	Quantitation Level (QL) <sup>1,2</sup> µg/L unless specified	Lowest Criteria Values µg/L unless specified
071	Dimethyl phthalate (131-11-3)	625	1.6	6.4	313000 <sup>5</sup>
068	Di-n-butyl phthalate (84-74-2)	625	2.5	10.0	2700 <sup>5</sup>
035	2,4-dinitrotoluene (121-14-2)	609	0.01	0.04	0.11 <sup>5</sup>
036	2,6-dinitrotoluene (606-20-2)	609/625	0.01	0.04	6250 <sup>19</sup>
069	Di-n-octyl phthalate (117-84-0)	625	2.5	10.0	3.1 <sup>19</sup>
037	1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	625	10	40.0	0.04 <sup>5</sup>
039	Fluoranthene (206-44-0)	625	2.2	8.8	300 <sup>5</sup>
080	Fluorene (86-73-7)	625	1.9	7.6	1300 <sup>5</sup>
009	Hexachlorobenzene (118-74-1)	612/625	0.05	0.2	0.00075 <sup>5</sup>
052	Hexachlorobutadiene (87-68-3)	625	0.09	0.36	0.44 <sup>5</sup>
053	Hexachlorocyclopentadiene (77-47-4)	1625B/625	2.5	10	240 <sup>5</sup>
012	Hexachloroethane (67-72-1)	625	1.6	6.4	1.9 <sup>5</sup>
083	Indeno(1,2,3-cd)Pyrene (193-39-5)	610/625	0.043	0.17	0.0028 <sup>6</sup>
054	Isophorone (78-59-1)	625	2.2	8.8	8.4 <sup>5</sup>
PBT	3-Methyl cholanthrene (56-49-5)	625	2.0	8.0	—
055	Naphthalene (91-20-3)	625	1.6	6.4	400 <sup>13</sup>
056	Nitrobenzene (98-95-3)	625	1.9	7.6	17 <sup>5</sup>
PSP	N-Nitrosodibutylamine (924-16-3)	625	10	40	0.005 <sup>15</sup>
PSP	N-Nitrosodiethylamine (55-18-5)	625	10	40	0.0008 <sup>14</sup>
061	N-Nitrosodimethylamine (62-75-9)	607/625	0.04	0.15	0.00069 <sup>5</sup>
063	N-Nitrosodi-n-propylamine (621-64-7)	607/625	0.12	0.46	0.005 <sup>5</sup>
062	N-Nitrosodiphenylamine (86-30-6)	625	1.9	7.6	5 <sup>5</sup>
PSP	Pentachlorobenzene (608-93-5)	625	1.9	7.6	0.154 <sup>6</sup>
PBT	Perylene (198-55-0)	625	1.9	7.6	—
081	Phenanthrene (85-01-8)	625	5.4	21.6	4 <sup>13</sup>
084	Pyrene (129-00-0)	625	1.9	7.6	960 <sup>5</sup>
008	1,2,4-Trichlorobenzene (120-82-1)	625	1.9	7.6	35 <sup>6</sup>
<b>GC/MS Fraction - Pesticides</b>					
089	Aldrin (309-00-2)	608	0.004	0.016	0.00013 <sup>5</sup>
102	alpha-BHC (319-84-6)	608	0.003	0.012	0.0039 <sup>5</sup>
103	beta-BHC (319-85-7)	608	0.006	0.024	0.014 <sup>5</sup>

EPA 307(A) REF. #	Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL) <sup>1,2</sup> µg/L unless specified	Quantitation Level (QL) <sup>1,2</sup> µg/L unless specified	Lowest Criteria Values µg/L unless specified
104	gamma-BHC (58-89-9)	608	0.009	0.036	0.019 <sup>5</sup>
105	delta-BHC (319-86-8)	608	0.004	0.016	7.0 <sup>13</sup>
091	Chlordane (57-74-9)	608	0.014	0.056	0.00057 <sup>5</sup>
092	4,4'-DDT (50-29-3)	608	0.012	0.048	0.00059 <sup>5</sup>
093	4,4'-DDE (72-55-9)	608	0.001	0.003 <sup>11</sup>	0.00059 <sup>5</sup>
094	4,4' DDD (72-54-8)	608	0.011	0.044	0.00083 <sup>5</sup>
PSP	Diazinon (333-41-5)	614/1657	0.0013	0.005 <sup>11</sup>	0.17 <sup>4</sup>
090	Dieldrin (60-57-1)	608	0.002	0.008	0.00014 <sup>5</sup>
095	alpha-Endosulfan (959-98-8)	608	0.014	0.056	0.0087 <sup>5</sup>
096	beta-Endosulfan (33213-65-9)	608	0.004	0.016	0.0087 <sup>5</sup>
097	Endosulfan Sulfate (1031-07-8)	608	0.066	0.26	0.093 <sup>5</sup>
098	Endrin (72-20-8)	608	0.006	0.024	0.0023 <sup>5</sup>
099	Endrin Aldehyde (7421-93-4)	608	0.023	0.092	0.76 <sup>5</sup>
100	Heptachlor (76-44-8)	608	0.003	0.012	0.00021 <sup>5</sup>
101	Heptachlor Epoxide (1024-57-3)	608	0.083	0.33	0.00010 <sup>5</sup>
PSP	Parathion (56-38-2)	614/1657	0.003	0.01 <sup>11</sup>	0.013 <sup>7</sup>
106	PCB-1242 (53469-21-9)	608	0.065	0.26	0.000170 <sup>5</sup>
107	PCB-1254 (11097-69-1)	625	36	144	0.000170 <sup>5</sup>
108	PCB-1221 (11104-28-2)	625	30	120	0.000170 <sup>5</sup>
109	PCB-1232 (11141-16-5)	608	0.13	0.5	0.000170 <sup>5</sup>
110	PCB-1248 (12672-29-6)	608	0.13	0.5	0.000170 <sup>5</sup>
111	PCB-1260 (11096-82-5)	608	0.13	0.5	10.5 <sup>13</sup>
112	PCB-1016 (12674-11-2)	608	0.13	0.5	0.42 <sup>13</sup>
113	Toxaphene (8001-35-2)	608	0.24	0.96	0.00073 <sup>5</sup>

PBT - Denotes a State of Washington toxic compound or additional parameter.

PSP – Puget Sound Pollutant

1. The DL and QL values were obtained from USEPA Region 10 (as compiled from 40 CFR Part 136), from Ecology Laboratory Manual, or from sources noted by other footnote. USEPA Region 10 compiled their list from the Methods Update Rule (MUR) FR vol. 72, no. 47, Monday,

March 12, 2007. Parameter #53 in Table 1c of the MUR was published as 2,3-dinitrophenol which is technically incorrect; parameter #53 should have been listed as 2,4-dinitrophenol and appears corrected here.

Methods have different ways to express detection limits and quantification limits. When a method published sensitivity information it was listed as a detection limit (DL); when a method indicated an instrument detection limit (IDL) that too was identified as a detection limit (DL). When a method was published with method detection limits (MDL) as per 40 CFR 136 Appendix B, then these limits were listed under MDL. When a method published a working or operational concentration range then the lowest value for that range was used to in the column called LLCR or lowest level of the concentration range. When a method published minimum levels, then these were listed under ML. Where only a DL or QL was provided the corresponding QL or DL was estimated by multiplying by 4 (or 0.25).

2. Detection level (DL) or detection limit means the minimum concentration of an analyte (substance) that can be measured and reported with a 99 percent confidence that the analyte concentration is greater than zero as determined by the procedure given in 40 CFR part 136, Appendix B.

Quantitation Level (QL) is equivalent to EPA's Minimum Level (ML) which is defined in 40 CFR Part 136 as the minimum level at which the entire GC/MS system must give recognizable mass spectra (background corrected) and acceptable calibration points. These levels were published as proposed in the Federal Register on March 28, 1997.

3. This criterion is dependent upon receiving water characteristics. This value is the aquatic life chronic value at a hardness of 25 mg/l
4. EPA 822-R-03-031
5. Human health criteria as fresh or marine – EPA National Toxic Rule
6. Fresh water aquatic life as Acute or Chronic – EPA recommended values
7. Aquatic life as Acute or Chronic – WAC 173-201A
8. USEPA Drinking Water Criteria
9. Taste and odor criteria
10. No human health based screening levels were available for 2-chloroethylvinyl ether. This value is the surface water screening values derived by U.S. EPA Region 4 Water Management Division. These values were obtained from Water Quality Criteria documents and represent the chronic ambient water quality criteria values for the protection of aquatic life.
11. USGS 2004-5194. Pesticides Detected in Urban Streams in King County, Washington, 1998–2003.
12. Virginia Institute of Marine Science. 1996. A Manual for the Analysis of Butyltins in Environmental Samples.

13. Estimated effect level
14. Report on Carcinogens. 11<sup>th</sup> Edition. National Institute of Health. 2007.
15. EPA Region 10 criteria approval, Warm Springs Confederated Tribes. 2006.
16. Chapter WAC 173-200.